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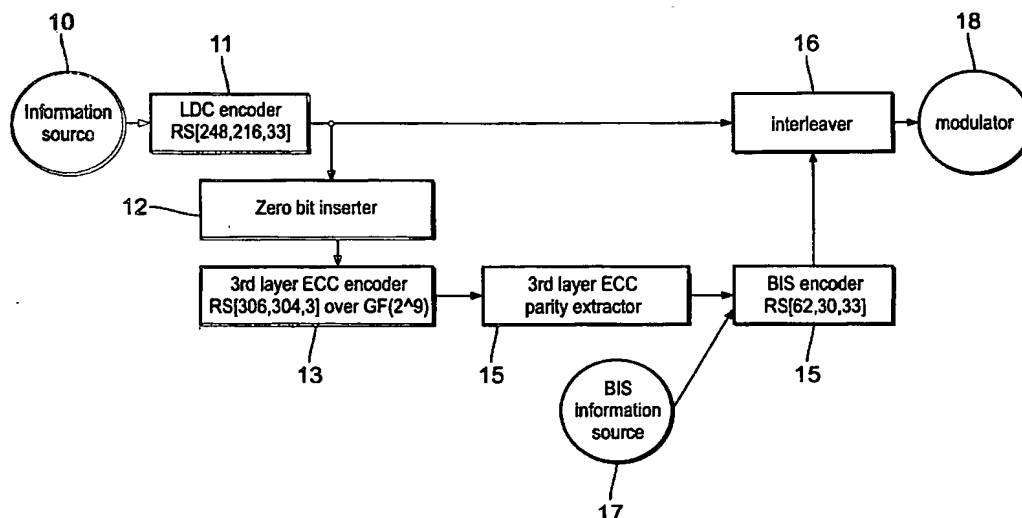
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(54) Title: METHOD AND APPARATUS FOR EMBEDDING AN ADDITIONAL LAYER OF ERROR CORRECTION INTO
AN ERROR CORRECTING CODE

(57) Abstract: The present invention relates to a method of embedding an additional layer of error correction into an error correcting code, wherein information is encoded into code words of said code over a first Galois field and wherein a number of code words are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block. In order to provide an additional layer of error correction that can be easily implemented without losing compatibility improving the error correction capabilities, a method is proposed comprising the steps of: - encoding the rows of at least said user data sub-block separately or in groups using a horizontal error correcting code over a second Galois field larger than said first Galois field to obtain horizontal parities, - embedding said horizontal parities as additional layer in said error correcting code.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03M13/29 G11B20/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>YUAN D F ET AL: "On performance of product codes and comparison with interleaved BCH codes in different mobile channels"</p> <p>TENCON '98. 1998 IEEE REGION 10 INTERNATIONAL CONFERENCE ON GLOBAL CONNECTIVITY IN ENERGY, COMPUTER, COMMUNICATION AND CONTROL NEW DELHI, INDIA 17-19 DEC. 1998, PISCATAWAY, NJ, USA, IEEE, US,</p> <p>17 December 1998 (1998-12-17), pages 619-621, XP010355502</p> <p>ISBN: 0-7803-4886-9</p> <p>page 621, paragraph 3; table 1</p> <p style="text-align: center;">--- -/--</p>	1, 11-16

☒ Further documents are listed in the continuation of box C.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 00 07300 A (SONY CORP ;KONINKL PHILIPS ELECTRONICS NV (NL)) 10 February 2000 (2000-02-10) cited in the application the whole document -----</p>	1-16

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